

prompted the author to abandon his earlier conclusion that the plant was a parasitic species of the Delesseriaceae. It now seems that what was thought to be a parasitic plant similar in form to *Gonimophyllum* is really the tetrasporic branchlet of the membranous "host," a species of *Holmesia*. Its original assignment to the Membranoptera group, although not as a parasitic member, is maintained. The description given of the "host" may now be considered that of the vegetative characters of *Holmesia californica*.

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#### LITERATURE CITED

1. DAWSON, E. Y. A review of the genus *Rhodymenia* with descriptions of new species. *Allan Hancock Pac. Exped.* 3: 115-181. 1941.
2. DE TONI, J. *Noterelle di nomenclature algologica VII. Primo elenco di Floridee omonime.* Published by the author. Brescia. 1936.
3. KYLIN, H. The marine red algae in the vicinity of the Biological Station at Friday Harbor, Washington. *Lunds Univ. Arsskr., N.F., Avd. 2,* 21(9): 1-87. 1925.
4. ———. Californische Rhodophyceen. *Ibid.* 37(2): 1-51. 1941.
5. PAPENFUSS, G. F. Notes on algal nomenclature. III. Miscellaneous species of Chlorophyceae, Phaeophyceae and Rhodophyceae. *Farlowia* 1: 337-346. 1944.
6. ———. Review of the *Acrochaetium-Rhodochorton* complex of the red algae. *Univ. Calif. Publ. Bot.* 18: 299-334. 1945.
7. SMITH, G. M. Marine algae of the Monterey Peninsula, California. Stanford University. 1944.

## A NEW ASTER FROM YUKON

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Among some specimens from Yukon recently sent to me for determination by Mr. J. P. Anderson is an *Aster* which seems unlike anything described previously from North America. With the exception of the well-known *Aster alpinus* L. and *A. sibiricus* L., the genus shows little tendency toward circumpolar distribution. There are in fact very few species of *Aster* in the far north. A survey of the more pertinent treatments of Siberian asters, such as those in Ledebour's *Flora Rossica*, Hultén's flora of Kamtchatka, Komarov's key to the plants of the far eastern region of the U.S.S.R., and Onno's revision of certain species supposedly related to *Aster alpinus* (*Bibl. Bot.* 106: 1-83. 1932), reveals nothing that might be considered allied to the plant in question. It seems proper, then, to look to the southward for its relatives. In Rydberg's flora of the Rocky Mountains it would key to *A. campestris* Nutt. Although superficially not unlike smaller forms of that species, it differs strikingly in its lax, herbaceous, equal phyllaries, as contrasted to the firm, chartaceous-based, more or less imbricate phyllaries of *A. campestris*. It also differs in its short simple caudex, instead of creeping rhizomes, as well as in

several other features. Its true affinities, as suggested by the involucre, and by the auriculate-clasping bases of the upper leaves, are with *A. modestus* Lindl. and *A. novae-angliae* L. In addition to the major differences among these three shown in the following table, *A. yukonensis* has smaller heads with fewer and shorter rays.

TABLE 1. COMPARISON OF THREE SPECIES OF ASTER

<i>A. yukonensis</i>	<i>A. novae-angliae</i>	<i>A. modestus</i>
Perennial from a very short simple caudex, with some fibrous roots.	Perennial from a thickened rhizomatous caudex, with very numerous fibrous roots.	Perennial from a creeping rhizome; fibrous roots not excessively numerous.
Stems several, decumbent, 6-18 cm. tall.	Stems several, erect, 3-20 dm. tall.	Stems solitary, erect, 3-10 dm. tall.
Leaves linear or nearly so, 2-4 cm. long, 1.5-3.5 mm. wide, entire.	Leaves lanceolate, 3-10 cm. long, 6-20 mm. wide, entire.	Leaves lanceolate, 4.5-13 cm. long, 8-40 mm. wide, usually toothed.
Heads 1 or 2.	Heads several or usually numerous.	Heads several or sometimes numerous.
Involucre villous with flattened hairs, as well as glandular.	Involucre glandular, scarcely or not at all hairy.	Involucre glandular, scarcely or not at all hairy.
Outer phyllaries essentially herbaceous to the base, not chartaceous.	Phyllaries evidently chartaceous toward the base.	Outer phyllaries essentially herbaceous to the base, not chartaceous.
Known only from southwestern Yukon.	Ontario to Alabama, west to North Dakota, Wyoming, and New Mexico.	Southern Alberta and British Columbia to Oregon, Idaho, and Minnesota.

***Aster yukonensis* sp. nov.** Herba perennis e caudice brevissimo, caulibus pluribus decumbentibus glanduloso-villosis 6-18 cm. altis, foliis linearibus sessilibus 2-4 cm. longis, 1.5-3.5 mm. latis, superioribus auriculatis subamplexicaulibus, capitulis solitariis vel 2, disco 8-13 mm. lato, involucre 7-10 mm. alto, glanduloso et villosa, bracteis linearibus herbaceis 2-3 seriatis equalibus, achaeniis obscure pauci-nervis, pappo paenissime simplicis.

Perennial with a very short simple caudex and fibrous roots; stems several, decumbent, slender, purple, 6-18 dm. long, sparsely to moderately spreading-villous and more or less glandular, especially upwards; leaves linear or nearly so, about 2-4 cm. long and 1.5-3.5 mm. wide, all sessile, or the lower subpetiolate, the upper becoming auriculate-clasping, fairly numerous and equally distributed (the internodes only about 6-18 mm. long), most of them nearly or quite glabrous, the upper becoming glandular, all acute or acuminate except for some rounded-obtuse and mucronate lower ones; heads solitary or 2, the disk when pressed 9-13 mm.

wide; involucre 7–10 mm. high, glandular, sparsely to moderately villous with flattened hairs; phyllaries green, purplish above, especially on the margins, or the inner purplish throughout, acute to attenuate-acuminate, in 2 to 3 equal series; ligules about 20, blue, 10 mm. long, 2 mm. wide; disk-corollas about 5.9–6.5 mm. long, the tube 1.8–2.3 mm., the lobes 0.6–0.8 mm.; style-appendages lanceolate or lance-subulate, acute to acuminate, 0.4–0.5 mm. long; achenes obscurely several-nerved, pubescent with stiff appressed brown-based hairs; pappus of about 35–40 slightly sordid or faintly purplish bristles, with a few obscure and slender short setae visible at 50 diameters magnification.

Type. South end of Lake Kluane, southwestern Yukon, July 23, 1944, *J. P. Anderson 9384* (Herbarium of the New York Botanical Garden). An isotype is retained in Mr. Anderson's collection at Iowa State College, Ames, Iowa, and another is included in the set laid aside for the University of Lund, Sweden.

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## TWO TIOID ASTRAGALUS NOVELTIES FROM THE ROCKY MOUNTAIN REGION<sup>1</sup>

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ASTRAGALUS (*Tium*) RACEMOSUS Pursh var. *typicus* nom. nov.  
*A. racemosus* Pursh, Fl. Am. Sept. 740. 1814.

ASTRAGALUS (*Tium*) RACEMOSUS Pursh var. *Treleasei* var. nov.  
A var. *typicus* differt: carina in apice purpurascens; leguminibus ovato-lanceolatis, 10–20 mm. longis et 4–7 mm. latis.

Differing from var. *typicus* in having the keel of the flowers with a prominent purple tip, and pods which are ovate-lanceolate in outline, the body 10–20 mm. long and 4–7 mm. wide.

Specimens examined. WYOMING. Uinta County: between Carter and Lyman, spring of 1940, *O. A. Beath 125* (type, Rocky Mountain Herbarium, University of Wyoming; isotype, Gray Herbarium, Harvard University); shale outcropping, bluffs of Blacks Fork River, 3 miles north of Lyman, June 10, 1937, *Reed C. Rollins 1650*. UTAH. Duchesne County: on the Wasatch formation near Duchesne, June 16, 1940, *O. A. Beath G-509*; 3 miles west of Duchesne, 1941, *Sam F. Trelease H-481*; in cultivation on University of Wyoming campus (seed collected in 1940 by O. A. Beath near Duchesne), July 28, 1943, *C. L. Porter 3300*. All of these collections are deposited in the Rocky Mountain Herbarium.

It was at first thought that this novelty was merely an aberrant form of the species or possibly a hybrid, but it has been found that var. *typicus* does not occur in either of the regions where var.

<sup>1</sup>Contribution no. 199 from the Department of Botany and the Rocky Mountain Herbarium of the University of Wyoming, Laramie.